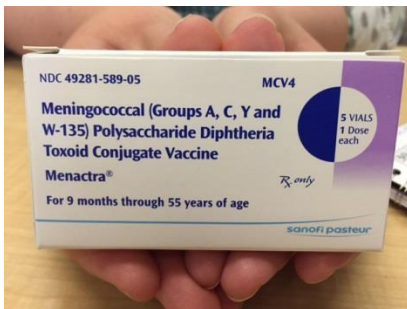


## Lot Number Variations between Unit of Sale and Unit of Use

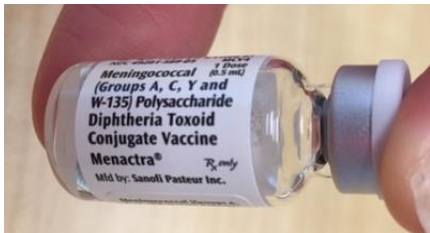
### ***What is Unit of Sale?***

The Unit of Sale (UoS) is the exterior packaging or carton that the vaccine is shipped in.



### ***What is the Unit of Use?***

The Unit of Use (UoU) is the vaccine vial or pre-filled syringe found within the UoS.



### ***Why is this important?***

There are a few vaccine manufacturers that will have a different lot number on the UoS and UoU for the same vaccine. This makes documenting the administration of the vaccine a challenge when trying to figure out which lot number you should record. The UoS is generally the lot number used for inventory management and it is the lot number that the North Dakota Department of Health (NDDoH) Immunization Program receives from the Centers for Disease Control and Prevention (CDC) shipping logs and enters into the North Dakota Immunization Information System (NDIIS) vaccine inventory. Some North Dakota providers and health systems are starting to implement the use of 2D barcode scanning for more accurate documentation of vaccine administration information. However, when using the 2D barcode, many practices want to use the lot number on the UoU which will not match the lot number in the NDIIS inventory.

***What does this mean?***

When doses are added to an NDIIS client record, lot number is a required field. The lot numbers available during dose data entry are only those lot numbers currently in the provider's NDIIS inventory, which are from the UoS. When the correct lot number is selected during dose entry, the dose will be decremented from the provider's inventory and will be tracked as either a public or private dose administered. When a dose is added to a provider's electronic health record (EHR) system and sent to the NDIIS electronically, the lot number must find an exact match on both the lot number and funding source. If the lot number entered into the EHR is from the UoU and not the UoS, a matching lot number cannot be found in the NDIIS and the vaccine abbreviation (dummy dose) will be added to the client immunization record in place of the actual administered lot number. Without a matching lot number found in the NDIIS and added to the record, the dose cannot be decremented from the provider's inventory and will not be correctly tracked as either a public or private dose administered. This means that providers enrolled in the Vaccines for Children (VFC) Program will not have an accurate inventory count of doses on hand or doses administered in the NDIIS. Both of these are used to determine if you are able to order more publicly funded vaccine from the VFC Program. When providers have a high number of doses on hand and a low number of doses administered due to incorrect data entry, the ND immunization program will not allow the provider to order additional vaccine, because it will appear as if the provider is not using their VFC vaccine.

***What can we do about it?***

When documenting the administration of a vaccine, it is recommended that you are recording the lot number from the UoS, not the UoU. This will ensure that the inventory management and doses administered date will stay in sync.

The table below shows the vaccines, available for order through the VFC program, that have a different lot number on the UoS and UoU. The table shows the patterns for the different lot numbers for the six VFC vaccines this difference impacts.

Vaccines manufactured by MedImmune (AstraZeneca), Pfizer, Merck and Bio CSL have the same lot number on their UoS and UoU so this issue does not have an impact on any of their vaccines.

Brand Name	Manufacturer	NDIIS Vaccine Abbreviation	Lot Number*	
			Unit of Sale¥	Unit of Use
ACTHib	Sanofi Pasteur	HIB (PRP-T) ACTHib	AA###AA <u>A</u>	AA###AA
IPOL	Sanofi Pasteur	IPV	A####-#	A####
Pentacel (antigen – Hib) †	Sanofi Pasteur	DTaP-Hib-IPV (Pentacel)	###AA <u>A</u>	###AA
Pentacel (diluent – DTaP/IPV) †	Sanofi Pasteur	DTaP-Hib-IPV (Pentacel)	<u>###AAA</u>	###AA
Menveo††	GSK	MCV4 Menveo	<u>A</u> ####	<u>B</u> ####
Rotarix‡	GSK	ROTAVIRUS (2 dose)	A## <u>A</u> ####A	A## <u>C</u> A####A (antigen)  A## <u>D</u> A####A (diluent)
MenHibrix‡‡	GSK	MEN C/Y-HIB	A###AA####A	A###AA####A (antigen)  <u>AA</u> ##A#### <u>A</u> (diluent)

\* The **A** and **B** in the lot number patterns represent an alphabetical character. The lots may contain any alphabetical character and are not limited to just the letters **A** and **B**. The **#** sign indicates a numerical character in the lot number pattern.

¥ The UoS lot number is the one that should be documented during vaccine administration.

† The diluent and antigen for Pentacel® come in the same UoS packaging so there is one lot number to document that allows for tracking of both components in the event of a recall. The antigen and diluent will each have their own lot number on the UoU that are both different than the UoS but will follow the same pattern.

†† The Menveo® antigen and diluent lot numbers follow the same pattern for UoS and UoU.

‡ The Rotarix® UoU antigen lot number has the letter “C” in the fourth position and the diluent lot number has a “D” in the fourth position.

‡‡ The MenHibrix® UoU antigen lot number is the same as the UoS lot number. The diluent lot number has an additional alpha character at the beginning and the end of the lot number and removes the alpha character that was in the fifth position of the UoS and UoU antigen lot number.<sup>1</sup>

<sup>1</sup> Reference: American Immunization Registry Association. (2016). *Lot Number Patterns by Manufacturer and Vaccine Table*. Retrieved from: [http://www.immregistries.org/resources/aira-mirow/AIRA\\_MIROW\\_Microguide\\_-\\_2015\\_Lot\\_Number\\_Patterns\\_v2.0.pdf](http://www.immregistries.org/resources/aira-mirow/AIRA_MIROW_Microguide_-_2015_Lot_Number_Patterns_v2.0.pdf)